

REMARKS

Reexamination and reconsideration of the application as amended are respectfully requested.

Claim 1 has been amended to indicate that the copolymer is present as discrete particle in aqueous phase. Specific support can be found for this, for example, at page 3, lines 25-26. For claim 1, the solvent system has been limited to aqueous carriers as described in the passage at page 7, lines 15-30. It is believed that these amendments to claim 1 address the 35 USC §112, first paragraph objection. Further, claim 1 has been amended to indicate that there is present at least some hydrophilic monomer units, which are preferred in providing a stable aqueous system of the discrete particles dispersed within the aqueous carrier. These clarifying amendments also further distinguish over the prior art, specifically, Bolich. Bolich has previously been indicated by the Examiner requires the presence of a hydrophobic volatile solvent and also exclude the presence of a hydrophilic monomer. The emphasis on the hydrophobic composition in terms of the copolymer and solvent, can be found, for example, in the Summary of the Invention and again in the Detailed Description, specifically at col. 3, lines 14-20 describing that the copolymer consists essentially of monomer units which are hydrophobic and that the copolymers are essentially substantially water insoluble (col. 4, line 25). The composition is further described as being present in a hydrophobic volatile branched chain hydrocarbon liquid which is a solvent for the copolymer. Specifically at col. 6, line 28, the preferred hydrocarbon solvents are described, and continuing at col. 7 where the hydrocarbons are described as those having a melting point or boiling point of greater than about 100°C.

With respect to the claim 17 rejection based on the T_g of less than 19°C, the T_g data is reported in Table 1 at page 16, Table 2 at page 19 and Table 3 on page 20, all of which show that the invention polymers having T_g 's of less than 19 in a wide range. The invention polymers listed in these three Tables have T_g 's ranging from -26 to 19. All the exemplified copolymers include hydrophilic monomer units.

With respect to the rejection over Mougin, both Mougin and Bolich seek to provide polymer compositions which rapidly form films on drying but at the same time are not sticky. They accomplish this in different ways. Mougin adds non-film-forming particles to a film

forming polymer which has a Tg of 25 C or less ("In order to obtain rapid film formation ... without a sticky effect, the non-film-forming particles must be present in the mixture" - Col 2, L 62-67). Bolich chooses a film forming polymer with "a Tg of at least about 30 C, so that they are not unduly sticky" (Col 3, L 64-66) and adds a hydrocarbon solvent that will "maintain the copolymer in solubilized form for a relatively long period as the composition dries, thus minimizing aggregation of the copolymer, therefore, allowing the copolymer to dry as a smoother film." (Col 7, L 16-20). Both thus teach away from the possibility that drying down an aqueous dispersion or emulsion of polymer will spontaneously form a smooth cohesive non-sticky film without the aid of a solvent. The invention is directed to a class of polymers where "the amount and nature of each component is chosen such that, upon drying, the inventive composition forms a flexible, non-sticky film having good cohesive strength" (Page 4, L 29-31).

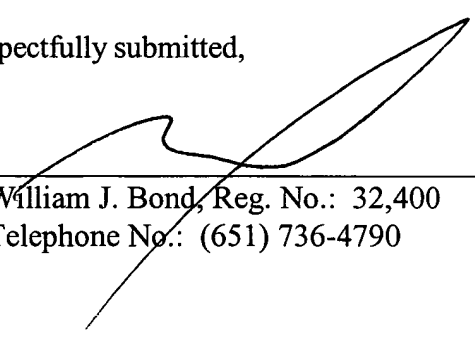
The particularly preferred polymers referred to in the rejection are described in Mougin as the "non-film-forming particles of the invention" (col.3, lines 51-53), used to reduce the stickiness.

The film forming polymer component, would be sticky.

In view of the above, further and favorable action in the form of a Notice of Allowance is respectfully requested.

Respectfully submitted,

April 13, 2004
Date

By: 
William J. Bond, Reg. No.: 32,400
Telephone No.: (651) 736-4790

Office of Intellectual Property Counsel
3M Innovative Properties Company
Facsimile No.: 651-736-3833